

That I have Poa annua L and Poa longi-reticulata sp. n. of the
first genus and Dryasia Forsteri Rth (according to Kunze) and
D. Lillibrandti Kunze sp. n. (from the summit of Mt Eka) of
the second. Should a plant named D. Forsteri by Kunze be in
your Herb., I wish you would submit it to an ~~examination~~ with
the description given in Bot. Flor. Austral. III. 579 which work
is not at my disposal. My plant differs from the description
in Renth's Enumer. of D. Forsteri = Acacia filiformis Forst.
in as much as it has the fertile glume hairy all over, with a
palea of equal size, and both only $\frac{1}{2}$ the size of the outer glume.
These latter are given by Renth as of equal length with the flower,
while no mention is made of the pubescence of the lower palea
and the upper palea is stated ~~being~~ to be $\frac{1}{2}$ as long as the
lower.

* As to Eragrostis falcata it may be that Gaudichaud
in the Botany to Desfontaines gives the same. But at its home,
but in Renth and Steud. it figures as a plant from West Australia,
for which reason I had taken no notice of it. Gaudichaud's
short description does not allow to locate it precisely; but
as the E. annua came from Masao's collection, it must be in
your herbarium. Gaudichaud's term "spirula hirs" and palea
"obtus"

Montreux, Canton Vaud, Switzerland
Missrs Soamey. March 29. 83.

Dear Sir,

After a long interval I have at last
been enabled to take up again the manuscript of a
Hawaiian Flora for which I made the first preparations
during the winter of 1871-72 at Cambridge with your kind
assistance, and which was only ready for final publication
up. If I could have remained in Germany or even in
Europe, the thing would have been off my hands long
ago, but in the winter of 75 my poor wife was
taken down with a pulmonary complaint which in
a comparatively short time resulted in chronic hepato-
tivation of the entire upper lobe of the right lung and
confined her to the bed until ^{the} next summer. Consider-
ing it impossible that she could stand the rigour of
another northern winter, we went to Madeira where
we spent the next 18 months, then returned for the
summer to Germany to see off our eldest son who had
finished his course of studies - Heidelberg, Strassburg

and Dorothy's - and was to return to the U. States,
and in autumn 78 sailed for the Canary Islands from
the dry climate of which group we expected better results
for my wife's health than Madeira had given. The next
3½ years we lived in Botania on the island Tenerife, ex-
cepting a summer visit to Switzerland in 81. Last summer,
at last, when our ^{wife} had attained an age at which her
could not be kept away from a public school any longer
and my wife's improvement held out a hope, that she might
stand again a northern climate, we left the Canary Is-
lands for good and, after a short sojourn in Zurich, con-
cluded to settle at Montreux, a place at the head of Lake
Geneva admirably sheltered from the cold north and east
winds. Here I soon resumed work on the Flora and yes-
terday have finished the revision of the Grasses, the last
that remained to be done.

Following your advice, I sent in summer 78 my Hawaiian
Grasses, together with the corresponding part of the manu-
script, which had been finished in the rough then already,
to General Munro, requesting that Gentlemen to compare
them with their Hawaiian Grasses or his herbaria, both from

Kew and from your Herbarium which embodied the Col-
lections of St. Hara and of the U. S. Expl. Exped. By Gen.
Munro's obliging response, and subsequent to his death,
by some order of Prof. Oliver I have been enabled
to fix all the grasses of my Collections in their proper pla-
ces, but Gen. Munro wrote me that among the Grasses re-
ceived from you there were 2 new species not contained
in my collection, viz.

↓ *Deyeuxia expansa* Munro
↓ and *Poa Murriei* Munro,
of which he did not feel at liberty to give me the de-
scriptions without your consent; also that he had seen
the following species from the Sandw. Idls: which had not
been received in my manuscript:

- ↓ *Engrachis fulvata* Gaud. = *E. nana* Munro Journ. Bot. 69.
- ↓ *Spodiopogon aureus* HBK. & Arn. = *Ischaemum murriei* Forst.
- ↓ *Paspalum filiforme* Fluegge
- ↓ *Schizostachyum glaucifolium* Munro.

My request to you now is that you have the goodness to
communicate to me a full description of each of the two
last species, in connection with which I will just remark

If you find a S. I. specimen in the Herbarium, please to communicate to me the schedule report.

This is the extent of my questions. I am aware that I may put you to a good deal of trouble by requesting answers to them, but, as you have been so kind to me in former years, I trust, my dear Sir, that you will be so once more. There is, however, no immediate hurry about it, and perhaps you are in a position that you can depute the work to a young Assistant or Collaborator.

My prolonged residence at the Atlantic Islands I have, of course, improved to make myself acquainted with their respective Floras. Both on Madeira and the Canaries I have collected, but most on the latter. Teacoffe, Palma and Juncus Casaria —, and the impressions received have reacted on and cleared my views of the Hawaiian Flora. Although the genera are precisely those of the Old Continent or nearly akin to them, yet most of the species are peculiar and almost as much limited in their distribution as is the island of the Pacific. Every island has its one or more peculiar

would lead me to suppose that it had some relation to my E. atropivides which Munro was inclined to regard as an Atropis, but the term nana would be quite out of place. Will you be good enough to notice particularly the structure of the fertile glumes and if they be obtuse or ever truncate, also if the lateral nerves unite at the apex or run out freely. If you could send me a small fragment or even only a few spikelets of any of the above mentioned species, it would save you a good deal of trouble, but I am afraid, it cannot be done. A few spikelets, also, of the genuine N. American Paspalum filiforme P. would be thankfully received.

Paspalum filiforme P. I take to be the Panicum (Digit.) filif. L. of your Manual of Bot. which has a filiform sheath to the spike and a second glume which equals the flower, while the lowest gl. is almost wanting. Now from the South. Isld. I only know Digitaria conocephala Gaud. in which the first gl. is entirely wanting while the second is quite small, does not attain more than $\frac{1}{4}$ the height of the spikelet, and the sheath, although narrow, is decidedly compressed and costate. Quite the same

plant I have collected in Java, and I have no doubt that it is the same species as *P. pruriens* Trin (from the Marquesas) which also figures in *Unguli Flor. Ind. Bat.* and probably grows in Tahiti and the Feejee (as *P. vitiosa* of authors). The only difference of the Marques plant from that of the S. I. is a more pronounced pubescence along the nerves of the 3^d glume or neural floret which, by the by, is 5-nerved, with the 2 lateral nerves on each side closely approximate both in the S. I. and Java plants. Gen. Munro admitted the correction of the identification of *Dig. conaquinca* Gaud. and *P. pruriens* Trin but thought that he had seen *Pasp. filiforme* also among S. I. plants; but I must be greatly mistaken indeed, if there is more than one species of *Digitaria* growing there. Please to examine carefully your specimens and let me know the result.

The *Panicum capillare* quoted in Beccari's Voyage I take to be the large form of *P. nephelophilum* Gaud. Prof. Oliver informs me that no S. I. plant of the former species is to be found at Java.

Sporobogon curvatus Ait & Arn. The description in Beccari's Voy. p. 273 of the Soo Choo grass differs from the Hawaiian

S. Byronii Trin. Only little (only by glabrous stem-nodes and a trilobate second glume), that I suspect, the two plants either belong to one species variable in these two characters, or that the plant which Gen. Munro remembered to have seen was really *S. Byronii*. All my specimens of *S. Byronii* have only 2 conjugate spikes, not 3 or 4 as those seen by Trinius.

Schizostachyum glauifolium Munro. - Only one kind of Bamboo is occasionally met with growing wild here and there in low valleys which are partly under cultivation, and this has been recognised from my leaf specimens as *Panicum vulgare* by Gen. Munro himself. From repeated inquiries I have come to the conclusion that it was introduced in the early parts of this century. Besides this, there was already on my arrival in 57 another smaller bamboo in cultivation, but of much later introduction than the former, which does not attain more than 10 to 15 ft in height, and which, ~~in~~ ⁱⁿ all probability, has come from Tahiti. I have never seen it in flower, nor heard of it: even having been in that condition, but I suspect that ^{it} must be the *Schizostachyum* in question.

The Hawaiian Consul is that place. Will you please
to set me right with regard to this matter?

My eldest son is on the Staff of the U. S. Geolo-
gical Survey is Doctor or Analytical Chemist. He
has lately published some articles on rare minerals
jointly with a Mr Cross in Siberian Journal.
My wife wishes to be kindly remembered by Mrs
Gray, in which request I beg you to include myself.
If another visit to Europe should lead you into Swit-
zerland, or not too far from the Alps, you would
oblige me by a note, that I may have the pleasure
of greeting you somewhere. Please to give Mr
C. Wright a warm greeting and believe me,
Dear Sir, to be with highest regards

Yours Truly
W. Hillebrand

representatives which do not occur on the others. The
singular phenomenon also of a peculiar genus, represented
by a single species, present itself here and there. Open
islands near Europe which have been run over by so
many explorers before would, of course, not offer much
chance of adding novelties; still I have found a few which
were not known to exist there before, particularly
among the grasses, mosses and algae. A collection of
the latter was submitted to Mr Bonnet two years ago
and found to contain quite a number of such as
were new to the islands, also a new species of *Polypodium*.

After I shall have got through with my Hawaiian
Flora, I shall begin to work up the Canary and Madeira
plants, of which there will be a good deal to spare for
friends. I do not know how far your Herbarium is
already supplied with them, but if you have any desi-
res, let me know and I shall endeavor to fill them
to the best of my ability. Please to remember me
kindly to Dr Darlow and tell him that I shall before
long address him some lines with regard to an exchange
of seaweeds. In returning to the Canaries in the au-
gust

of 81 we touched at 6 ports of Morocco, or rich
places for marine algae as I have seen anywhere, and
in each of which I have gathered as much as time
and tides would allow me. If you could also place
me in communication with some collector for the
exchange of Gracilaria and Egelonella, I should be obliged
to you, and still more of ferns. My collection of ferns
has increased a good deal, but those of Tropical America
are poorly represented in it.

Speaking of ferns brings to my mind the great
disadvantage I have laboured under in not being able
anywhere to get access to Brackenridges Ferns of the
Exploring Exped. In all Germany there exists only a sin-
gle copy at the Royal Library of Berlin which only allows
the use of its books at the Reading Rooms and which
happened to be closed when I visited ~~Berlin~~ ^{Berlin} city. Last
summer, while at Paris, I went to the National Library,
feeling sure, it must be there, but found only the text without
the plates. I have been told that the De Cadenne Library
is all but complete. Could you favor me with a few
lines of introduction to either of the two celebrated

Libraries? Geneva is near, and access to their Library
and Herbarium would be of great service to me, inas-
much as I live here and distant from Library resources.
The rich Delessert Herbarium would thereby also become
accessible. If by any chance one of the few extant co-
pies of Brackenridges Fern work should come in the
American book market, I wish you would secure it for
me. For the cost you could draw on my friend the
Hawaiian Commissioner in Washington J. Kott Smith.
Thus also I should wish to get in possession of Sullivan's
Publication on the Wores of the Expl. Exped.

Not long ago I requested Mr Kott Smith to procure
for me the Flora of California. It seems that he could-
not find it and was advised by that gentleman to
apply to Prof. Whitney of California. I do not perceive
exactly the meaning of this. Prof. Whitney so far as I
know, still occupies the Chair for Geology in Cambridge,
and I had imagined that, although the work has been
published at the expense of the State of California, it
would be in the book trade. If the stock of books is
held in California, I could apply through his Secretary,